

HISTORIC PROPERTY INVENTORY FORM

IDENTIFICATION SECTION

Field Site No. 303-A OAHP No. _____ Date Recorded 17 Oct 1994
Site Name Historic Magazine Product Storage Revised 28 May 1998
Common Storage Building
Field Recorder K.A. Simmons, M.E. Crist, I.C. Lindsay, J.K. Keating
Owner's Name U.S. Department of Energy, Richland Operations Office
Address P.O. Box 550
City/State/Zip Code Richland, WA 99352

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Other (HABS, HAER, NHL)
☐ Local Designation

Photography

Photography Neg. No. HCRL: Roll 180, Frames 6 & 11
(Roll No. & Frame No.)
View of All exterior facades
Date 17 Oct 1994

Photo at right; Roll 180, Frame 11
view of north and east facades

Classification

District Status

☐ District
☒ NR

☐ Site
☐ SR

☒ Building
☐ LR

☐ Structure
☐ INV

☐ Object

Contributing

☒

Non-Contributing

☐

District/Thematic Nomination Name

Hanford Site Manhattan Project and Cold War Era Historic District

Description Section

Materials & Features/Structural Types

Building Type

Industry

Plan

Rectangular

Structural System

Reinforced concrete

No. of Stories

One

Roof Type

☐ Gable
☒ Flat
☐ Monitor
☐ Gambrel
☐ Shed

☐ Hip
☐ Pyramidal
☐ Other (specify) _____

Roof Material

☐ Wood Shingle
☐ Wood Shake
☐ Composition
☐ Slate
☒ Tar/Built-up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) _____
☐ Not visible

Foundation

☐ Log ☐ Concrete
☐ Post & Pier ☐ Block
☐ Stone ☒ Poured
☐ Brick ☐ Other (specify) _____
☐ Not visible

Cladding (exterior Wall Surfaces)

☐ Log
☐ Horizontal Wood Siding
☐ Rustic/Drop
☐ Clapboard

☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco

☒ Terra Cotta
☒ Concrete/Concrete Block (both)
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) _____

Integrity

(Include detailed description in
Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

LOCATION SECTION

Address

Building 303-A, 300 Area

City/Town/County/Zip Code

Richland/Benton County/99352

Twp 10 N Range 28 E

Section 11

1/4 Section NW

1/4 1/4 Sec

Tax No./Parcel No.

Acreage

Quadrangle or map name

Richland, Washington Quad. - 7.5 min series 1992

UTM References Zone

11

Easting

324460

Northing

5137860

Plat/Block/Lot

Supplemental Map(s)



High Styles/Forms (Check one or more of the following)

☐ Greek Revival
☐ Gothic Revival
☐ Italianate
☐ Second Empire
☐ Romanesque Revival
☐ Stick Style
☐ Queen Anne
☐ Shingle Style
☐ Colonial Revival
☐ Beaux Arts/Neoclassical
☐ Chicago/Commercial Style
☐ American Foursquare
☐ Mission Revival

☐ Spanish Colonial Revival/Mediterranean
☐ Tudor Revival
☐ Craftsman/Arts & Crafts
☐ Bungalow
☐ Prairie Style
☐ Art Deco/Art Moderne
☐ Rustic Style
☐ International Style
☐ Northwest Style
☐ Commercial Vernacular
☐ Residential Vernacular (see below)
☒ Other (specify) Industrial Vernacular

Vernacular House Types

☐ Gable Front
☐ Gable Front and Wing
☐ Side Gable

☐ Cross Gable
☐ Pyramidal/Hipped
☐ Other (specify) _____

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- | | |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | Agriculture |
| <input type="checkbox"/> | Architecture/Landscape Architecture |
| <input type="checkbox"/> | Arts |
| <input type="checkbox"/> | Commerce |
| <input type="checkbox"/> | Communications |
| <input type="checkbox"/> | Community Planning/Development |

- | | |
|--------------------------|---------------------------------|
| <input type="checkbox"/> | Conservation |
| <input type="checkbox"/> | Education |
| <input type="checkbox"/> | Entertainment/Recreation |
| <input type="checkbox"/> | Ethnic Heritage (specify) _____ |
| <input type="checkbox"/> | Health/Medicine |
| <input type="checkbox"/> | Manufacturing/Industry |
| <input type="checkbox"/> | Military |

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> | Politics/Government/Law |
| <input type="checkbox"/> | Religion |
| <input checked="" type="checkbox"/> | Science & Engineering |
| <input type="checkbox"/> | Social Movements/Organizations |
| <input type="checkbox"/> | Transportation |
| <input checked="" type="checkbox"/> | Other (specify) <u>Manhattan Project and Cold War Eras</u> |
| <input checked="" type="checkbox"/> | Study Unit Sub-Theme(s) <u>Fuel Manufacture, Facilities Support
(Uranium Fuel Storage)</u> |

Statement of Significance

Date of Construction 1943 Architect/Engineer/Builder Manhattan Engineer District and duPont Company

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 303-A building is one of eight Fresh Metal Storage buildings constructed in a east-west line in the 300 Area. 303-A was used to store unirradiated uranium fuel rods (some workers called them "green fuel"). During storage the rods would be inspected for correct measurements and components. Samples would be taken from the rods to be tested at the 305 Test Pile/Hot Cell Verification building for purity. As needed, the rods would be transferred to the 313 Metal Fuels Fabrication Facility or the 314 Metallurgical Engineering Laboratory to be converted into fuel and target elements which were irradiated in the 100 Area reactors. Fuel element fabrication for the 100-N Reactor was the exception; it took place in the 333 Fuel Cladding/Manufacturing Facility.

During the fabrication process, fuel rods (going to the 100 Areas other than N) would be "canned" within aluminium cans and "bonded" to them in order to prevent any radioactive fission product releases into the coolant water, prevent uranium corrosion from the coolant, and to increase transfer of the heat from the slug into the cooling water. During fabrication of fuel elements for the 100-N Reactor, rods would go through a process involving degreasing, chemical treatments, heating, extrusion, and machining cutting. A former 300 Area worker (Everet Weakley) recalls that "dummies" from the 100 Area Reactors were brought back to the 303-A building to be cleaned, re-measured and inspected for reuse. 303-A is still currently used as a storage space for uranium billets.

The 303-A building provided a location for an important step in the fuel element fabrication process in the 300 Area. It was a holding zone for the uranium rods where they were inspected and tested against the regulations for a successful and safe fabrication process. It is therefore the conclusion of the U.S. Department of Energy that Building 303-A is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

Description of Physical Appearance

The 303-A Storage Building is a single story, one room, concrete structure, measuring 48 feet long (N-S) by 27 feet wide (E-W). Total area covers 1,296 ft². The walls change from concrete block to poured concrete three quarters of the way up each wall. The south facade has a single, metal entrance door with a louver located at its bottom. On the west facade is a small, fluted metal addition with a single, metal door. The north facade has two doors; one is a single, metal door with an original light fixture extending over it. The other door is an unevenly split double door. There are two 8-inch round metal vents extending from the concrete at ground level on the east facade and two 8-inch vents extending from the concrete at ground level on its west facade. The roof is covered with tar and gravel and supported by reinforced concrete beams. There are no visible architectural modifications to the structure.

The interior is a storage facility and does not contain any distinct features or equipment, however, the interior was not examined due to the potential radioactive hazards within the building. Runoff from cleaning the "dummies" was discharged into the process/sanitary sewer lines. Other activities taking place in or near the 303 buildings that resulted in contaminated conditions include airborne contamination from unloading uranium billets and rods, moving contaminated vehicles and tools in and around the buildings, spontaneous uranium scrap barrel and billet fires, and various acid and solvent spills.

Major Bibliographic References

See Continuation Page

Major Bibliographic References

Architectural & Concrete Plan, & Sections, Drawing #HW-69534. 1976. General Electric Company. Richland, Washington.

300 Area Site Asset Catalog. Westinghouse Hanford Company. Richland, Washington.

Gerber, M.S. 1993. *Manhattan Project Buildings and Facilities at the Hanford Site: A Construction History* . WHC-MR-0425, Westinghouse Hanford Company. Richland, Washington.

Gerber, M.S. 1992. *Past Practices Technical Characterization Study - 300 Area - Hanford Site* . WHC-MR-0338, Westinghouse Hanford Company. Richland, Washington.

Vitner, Paul (former employee). February 1998. Personal Communication. Richland, Washington.

Weakley, Everet (former employee). February 1998. Personal Communication. Richland, Washington.